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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/874,932 | 06/05/2001 | Piu B. Wong | 47586/P062US/10026079 | 3483 |

7590 06/22/2006
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DALLAS, TX 75201

| EXAMINER |
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NGUYEN, PHUONGCHAU BA

| ART UNIT | PAPER NUMBER |
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2616

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|---|------------------------------------|--|
| Office Action Summary | Application No. 09/874,932 | Applicant(s) WONG ET AL. | |
| | Examiner Phuongchau Ba Nguyen | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1-28-5 election.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) 14-40 is/are withdrawn from consideration.
 5) ☒ Claim(s) 6-12 is/are allowed.
 6) ☒ Claim(s) 1-5 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3-5-2</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3–5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gitlin (6,018,528).

Regarding claim 1,

Gitlin (6,018,528) discloses a method of transmitting data from a plurality of mobile stations to a base station, the method comprising:

Dividing the plurality of mobile stations into a first (high speed) and a second (low speed) group, the first group comprising a first set of mobile stations using a first set of time average data rates and the second group comprising a second set of mobile stations using a second set of time average

data rates, wherein the first set of time average data rates is higher than the second set of time average data rates (see fig.4); and

Transmitting data from the first set of mobile stations at a higher time average data rate than data transmitted from the second set of mobile stations (see fig.4).

Regarding claim 3, Gitlin further discloses wherein the plurality of mobile stations only transmit one at a time (col.4, lines 11–22, users may only transmit on available timeslot assignments).

Regarding claim 4, Gitlin further discloses wherein the first set of mobile stations transmit more often than the second set of mobile stations (by transmitting higher rate—emphasis added, see fig.4).

Regarding claim 5,

Gitlin further discloses wherein the plurality of mobile stations transmit at their maximum allowable instantaneous data rate (i.e., high speed users

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transmit at high speed rate, medium or low speed users transmit at medium or low speed rate as their maximum allowable speed rate—emphasis added, see fig.4).

Claim Rejections – 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gitlin in view of Baines (6,421,334)

Regarding claim 2,

Gitlin discloses all the claimed limitations, except (1) wherein the first set of mobile stations transmit at a lower power than the second set of mobile stations.

However, in the same field of endeavor, Baines (6,421,334) discloses high rate users transmitting at lower power (col.9, lines 15–20)(corresponding to (1)). Therefore, it would have been obvious to an artisan to apply Baines's teaching to Gitlin's system with the motivation being to reduce inter-cell interference.

Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance:

Regarding claims 6–11, the prior art fails to teach a method of transmitting data from a plurality of mobile stations to a base station, the method comprising "calculating first cross correlations between array response vectors of the first mobile station and the rest of the mobile stations in the first data rate group; comparing the first cross correlations to a predetermined threshold; selecting a second mobile station unless all the first cross correlations are greater than or equal to the predetermined threshold and all second cross correlations between array response vectors of the first mobile station and mobile stations in the second data rate group are greater than or

equal to the predetermined threshold,” which is considered in combination with other limitations, as specified in the independent claim 6.

Regarding claims 12–13, the prior art fails to teach a method of transmitting data from a plurality of mobile stations to a base station, the method comprising “calculating cross correlation of array response vectors of the first mobile station and array response vectors of other selected mobile stations; selecting one or more of the mobile stations based on mobile stations having cross correlations less than a predetermined threshold,” which is considered in combination with other limitations, as specified in the independent claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Response to Arguments

6. Applicant's arguments filed 1-18-5 have been fully considered but they are not persuasive.

A/. Applicant elected group 1 of claims 1-13 with traverse that group 1 and 2 are directed to a method for transmitting data from a plurality of mobile stations to a base station and group 2 of claims 14-20 should be examined with provisionally elected claims 1-13 of group 1.

In reply, the restriction of groups 1 and 2 is proper because group 1 of claims 1-13 and group 2 of claims 14-20 are distinguished from each other because group 1 claims has a distinguished feature of "the first set of mobiles transmitting higher than the second set of mobiles", which was classified in 370/328, wherein group 2 claims has a distinguished feature of "a selected mobiles transmitting data simultaneously during a next timeslot", which was classified in 370/347, both subclasses are under communication in free space with different technique. Hence, with this clarification of the distinctions of claimed limitations in claims 1-13 of group 1 & claims 14-20 of group 2

constituted groups 1 and 2 as two inventions. Therefore, the previous restriction is proper. Thus, the restriction is made final.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

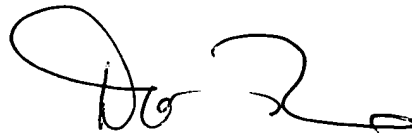
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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phuongchau Ba Nguyen
Examiner
Art Unit 2616



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600